

22. (Currently Amended) The apparatus of claim 19-37, further comprising keyway cut in the bearing portion of the shaft for the purpose of inserting bearing material inserts, without jeopardizing shaft strength.

23. (Currently Amended) The apparatus of claim 19-37, further comprising of increasing the shaft diameter in between each pair of bearings to render the stationary shaft to be generally non-deflecting in between each bearing pair.

24. (Currently Amended) The apparatus of claim 19-37, further comprising of adding removable rigid shaft clamps around the shaft ends to keep them rigidly aligned with the aid of proper fastening of said clamps to the roller supports.

25. (Currently Amended) The apparatus of claim 19-37, further comprising of a plurality of bearing housings connected to the interior of said roller such that said bearing housings rotate with the roller and therefore their alignment remains assured.

26. (Currently Amended) The apparatus of claim 19-37, further comprising of one or more keyways to attach each individual bearing housing to the roller in a manner to allow for differences in thermal expansion between the stationary shaft and the hollow roller.

27. (Canceled)

28. (Currently Amended) The apparatus of claim 19-37, further comprising of end plates added to each bearing housing as needed to secure the bearing housing sleeve or inserts.

29. (Currently Amended) The apparatus of claim 19-37, further comprising of adding two thrust bearing surfaces, as an integral part of the thickened center portion of the stationary shaft, thereby allowing the two external bearing housings or inserts to absorb both radial and axial thrust loadings.

30. (Currently Amended) The apparatus of claim 19-37, further comprising of using tapered bearings to allow the ~~two-external~~ sleeve type bearing housings ~~or~~ or inserts to absorb both radial and axial thrust loads.

31. (Currently Amended) The apparatus of claim 19-37, further comprising of centering each bearing housing within the roller by means of vane like radial ribs which act as pump impeller vanes so as to motivate the surrounding fluid in between the shaft and the contracting sleeve-type bearing housings to flow in the radial direction through ports ~~within both the hollow roller wall and the rotating bearing housing~~, for the purpose of bearing cooling or lubrication.

32. (Currently Amended) The apparatus of claim 19-37, further comprising of cooling passages on the inside of the stationary shaft for roller bearing cooling in high temperature operating conditions.